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ABSTRACT

This manual presents guidelines for vocational education administrators and evaluators on how vocational evaluation can be integrated into career education and how it ties in with the mandates of federal legislation concerning the handicapped. Beginning the manual, a philosophy of vocational assessment is offered followed by a discussion of the relevancy of vocational assessment to career development. Next, the major methods of vocational assessment and the criteria for selecting a vocational evaluation system are examined. A comparison for selecting five evaluation systems using educational variables is then presented in chart form from both the administrator's and evaluator's perspective. Following this information are sections on setting up, staffing, and operating the vocational assessment unit. Also included is a section on writing the vocational evaluation report. The future of vocational assessment is analyzed in the final section. A bibliography and a glossary of terms conclude the manual. (JH)

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State of New Jersey
Department of Education
Division of Vocational Education

GUIDELINES FOR ESTABLISHING A VOCATIONAL ASSESSMENT SYSTEM FOR THE SPECIAL NEEDS STUDENT

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INTRODUCTION

A void has existed in the literature pertaining to vocational evaluation of students within the field of education. The present state of the art concerns itself with vocational rehabilitation, and as a result the concepts and strategies do not lend themselves readily to public education.

This manual attempts to bridge the gap between the two fields and to present the evaluative process to educators. It demonstrates how vocational evaluation can be integrated into career education and how it ties in with the mandates of Federal legislation concerning the handicapped.

The major methods of vocational assessment and the criteria for selecting a vocational evaluation system are discussed. A comparison of five evaluation systems using educational variables is presented in chart form from both the administrator's and evaluator's perspective.

Setting up, staffing, and operating the vocational assessment unit is outlined; and a section dealing with the future of vocational assessment concludes the project.

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I. PHILOSOPHY OF VOCATIONAL ASSESSMENT

While special needs students are examined psychologically, sociologically, and academically, and then placed into vocational programs, their ability to function successfully in those programs is often overlooked. Knowing that a student is classified or below the norm in reading is important, but more information is needed to help the instructor in a trade shop to work effectively with special needs students. Awareness of the student's level of performance in relation to the trade, hand-tool dexterity, interest and aptitudes, and identification of specific work factors and worker characteristics are invaluable when working with a special needs student in a vocational setting.

Vocational assessment has been able to fill that void by identifying student needs in relation to a prospective vocational program, thus enhancing the success for the student in the vocational school.

With the increasing appearance of vocational assessment in New Jersey Public Schools, both comprehensive high schools and vocational schools, there is a growing need for a better understanding of the vocational evaluation and assessment process.

Defined in its most simple structure (Sankovsky, R. 1970), Vocational Evaluation is the process of:

1. Establishing criteria and vocational goals.
2. Collecting information regarding vocational potential.
3. Analyzing information regarding vocational potential.
4. Decisionmaking on potential vocational goals and predicting outcome.
5. Determining the effectiveness of the evaluation process by feedback obtained through followup.

Educationally, vocational evaluation is defined as an assessment of the student's specific interests, aptitudes and abilities, compiled and interpreted to prescribe specific vocational planning. It is a service used by the Child Study Team and school guidance counselor to provide direction through vocational planning or occupational preparation for their respective students, (Scelfo, J., Micali, J., 1976).

While there has been a great deal of research in vocational evaluation, the emphasis has been on methodology and technology; and an overriding philosophy of vocational evaluation in education is yet to be written. A structure of vocational evaluation as outlined by Dr. William Gellman (1968) provides one of the few attempts at establishing a philosophical foundation. Towards this end, the following outline touches upon those principals of theory and practice of vocational evaluation as an empirical science and its application to education.

1. Theoretical Assumptions
2. The Goals of Vocational Assessment
3. The Process of Vocational Assessment
4. Vocational Program Planning
5. Principles of Vocational Assessment

THEORETICAL ASSUMPTIONS

Theoretically, vocational assessment is a process of acquiring vocational information about the strengths and limitations of a student, and prescribing specific vocational planning. Empirically, vocational assessment defines the data to be observed in the work situation and the methodologies for evaluating potentials, interests, aptitudes, and behavior relevant to successful placement in a vocational or career education program.

THE GOALS OF VOCATIONAL ASSESSMENT

Vocational evaluation is prognostic, answering questions such as what kind of work the student is able to perform and what types of training are necessary to enforce him to develop salable skills. Assessment questions are not retrospective. They deal with past events only insofar as they affect future work roles or activities.

Vocational assessment is designed to develop a treatment plan that will predict and pattern a student's future work behavior. Accurate predictions reflect (1) knowledge of the student's work personality, (2) an estimate of the impact of the student's handicap upon his or her performance, (3) change possibilities of the work personality, (4) training capacity, and (5) the student's projected future levels and types of work activities.

THE PROCESS OF VOCATIONAL ASSESSMENT

Vocational evaluators in education see what they have been taught to see as significant, and they interpret their observations in terms of informal or formal vocational theory. Selection and interpretation are predicated upon the evaluator's theoretic and value systems.

The purpose of vocational assessment is to examine the work personality, defining it operationally, as the functioning behavior exhibited by the student in a work setting. From the viewpoint of the vocational evaluator, the work personality includes estimates of potentialities for training and acquiring specialized skills demanded by a changing society. Vocational evaluators observe the motivational forces and incentives leading to socially approved work. They seek the attitudinal and value contents that shape the meaning of work for the student.

The process of vocational assessment is designed to observe, define, and analyze the student's work pattern. In assessing vocational behavior, student activities are divided into two broad categories: (1) transitional behavior that copes with work problems and (2) behavior that denies the existence of a work problem. Coping behavior may be viewed as dynamic and subject to modification in accordance with situational requirements. Avoidance behavior leads to static, unchanging, or regressive work patterns. Since vocational assessment focuses upon the work personality in transition, the student's capacity to learn in a work situation constitutes a primary observational area. Coping behavior is a prerequisite for vocational training and indicates the student's capability of learning how to learn in a work situation, that is, the student exhibits the emotional and cognitive components necessary to adapt and improve in a work situation.

Since vocational assessment is part of the process of vocational or career education, training capacity is a matter of concern. More precisely, a significant set of questions deals with the student's ability to benefit from either formal or informal training or from experimental learning in a work setting.

VOCATIONAL PROGRAM PLANNING

Vocational assessment provides a basis for vocational or career planning. This planning attempts to: (1) maximize the psychosocial factors that strengthen the student's work personality; (2) increase the capacity to learn in a work situation; (3) develop an acceptable personality; and (4) prepare the student for the type of work situation in which she/he will function. These objectives bring into play psychology, social work, academic achievement, and vocational education, including knowledge of work realities in the latter.

Vocational program planning is concerned with the broad areas of behavior and of learning in a work setting.

PRINCIPLES OF VOCATIONAL ASSESSMENT

The following principles (Maier, H., 1965, Gellman, W., 1968) attempt to summarize the factors to be taken into account in developing and using vocational assessment techniques in education:

1. Vocational assessment is future oriented; it is designed to enable the assessor to predict vocational development and behavior. As such, it is instrumental. Its intelligence functions are defined by goals set for a particular student.
2. Vocational assessment, to be effective, must be specific for each student and involve a vocational prescription.
3. Vocational assessment should be periodic, assessing progress and the validity of the prediction at regular intervals. It assumes that students change and that such change necessitates reevaluation at regular intervals.
4. Vocational assessment requires thorough knowledge of training programs and resources available to help a given student at a particular period of time.
5. With each student, the vocational evaluator programs for continued vocational development through learning, training, and modification of academic and vocational components.
6. Vocational assessments bring into play persons from various professional disciplines for each student. Typically, they include the school guidance counselor, school psychologist, social worker, and learning disabilities consultant.

A review of the objectives of vocational assessment should enable educators involved in the evaluation process to better understand the philosophies and principles of vocational assessment. Specifically reviewing the objectives developed by the VEWAA (Vocational Evaluation and Work Adjustment Association) Special Project (VEWAA Bulletin, July, 1975) with some minor modifications will enable educators to appreciate the relevancy of vocational assessment to education.

THE SPECIFIC OBJECTIVES OF VOCATIONAL ASSESSMENT SERVICES

As an assessment process, vocational evaluation shares the goal of assessment common to the Child Study Team – to generate a course of action for the student through educational planning and curriculum development, albeit through the vocational school.

The first specific objective (VEWA Bulletin, July, 1975) *of the vocational evaluation process is to identify interests, aptitudes, and activities for an appropriate vocational program for the student being served.* This should recognize that a vocational program for an individual student may not be one of those included within the vocational school.

The second specific objective of vocational evaluation is to identify the functional competencies and functional disabilities of the student. Attainment of this objective must take into account the recommended vocational program for the student and the competencies required for successful performance of activities in this program. This, by necessity, includes methods for identifying functional competencies and disabilities in areas other than those directly related to success in this program.

The third specific objective is to identify those remedial services needed to overcome the functional disabilities which are barriers to successful performance in the recommended vocational program.

The fourth specific objective of vocational evaluation services is to reduce or eliminate functional disabilities of the student. This is essentially a treatment or remedial objective. It distinctly contrasts with the preceding three objectives, which are primarily concerned with information gathering. We have already noted that vocational evaluation differs from other assessment techniques in that it extends over a period of several days or even weeks. During the course of vocational evaluation, it is likely that "beneficial effects" will be found, if only for the simple reason that students in new situations usually change to accomodate themselves to the situation.

In fact, there is evidence to suggest that a positive change results because of vocational evaluation. Gwilliam (1970) identifies several direct benefits from vocational evaluation services, including greater awareness of goals, a better understanding of personal abilities, capacity, potential, and more realistic aspirations. In a subsequent study, it was found that counselors tended to make referrals to vocational evaluation primarily because it provided an opportunity for self assessment of abilities and interests and to develop a more realistic self-concept. (Neilson, 1972)

II. VOCATIONAL ASSESSMENT AND CAREER DEVELOPMENT

In order to better understand the relevancy of vocational assessment to Career Education and Career Development, we must begin by first looking at the definition for both of these concepts.

> **Career Education** is an integral dimension of the nursery through adult curriculum which provides for all students a sequential continuum of experience through which each individual may develop a more realistic perception of his/her capabilities and prepare him/her for entry and reentry into employment and/or continuing education. (Doherty, 1972)

> **Career Development** is that one aspect of life-long individual development which relates to the occupational needs of the individual and which occurs with social development, emotional development, intellectual development, and general personal development. (Gambino, 1971)

Both concepts have a certain similarity; they both stress a sequential continuum of experiences over a long duration which will prepare the individual for employment. The New Jersey Model for Career Development Education is an approach best exemplifying an educational plan that provides occupational preparation from the preschool level through adulthood. It emphasizes occupational awareness of vocational opportunities by joining technical activities with academic lessons.

Where does Vocational Assessment fit into the New Jersey model for Career Development Education? *Ideally, vocational assessment should be an integral part of the student's total career development starting from preschool and continuing through adulthood.* Every student will be eventually confronted with the problems of making a sound occupational choice.

Vocational assessment can guide the student through the selection process by providing exposure to a variety of occupational areas. Vocational assessment can further aid the student in his career development in the following ways:

1. Matching occupational interests with abilities.
2. Developing an educational plan which will include general and specific skill training towards the occupational goal.
3. Preparing for entry into on-the-job training or actual employment.
4. Maintaining or upgrading skills to secure employment or for advancement.

If it is not possible to provide vocational assessment from an individual's preschool days through adulthood and if a time must be selected in that span to vocationally assess an individual's potential, we would select the 7th – 9th grade levels as the appropriate time to introduce a structured Vocational Assessment Program. When studying the New Jersey Model for Career Development Education (see Figure 1, Integrating Vocational Assessment into the New Jersey Career Development Model), it becomes apparent that the most logical time for a student to be involved in vocational assessment should be just after exposure to Introduction to Vocations and before Employment Orientation.

Through Introduction to Vocations, the junior high school or middle school level student is provided with exploratory experiences that serve as a basis upon which to make preliminary career decisions and a general understanding of the job market. The student is further aided in making career plans which are realistic. The program operates on a cycling basis emphasing short term, manipulative, and exploratory experiences. The six areas included in the cycle are Know Yourself, Health Service, Home Economics, Industrial Arts, Business Education, and Science. A central concept of the Introduction to Vocations program is hands-on experience. To instill pupil awareness, various aids such as films, speakers from business and industry, occupational literature, field trips, and individual and group guidance are used. (Blair and Law, 1973)

A student is ready for the Vocational Assessment phase after she/he has had the experiences offered by the Introduction to Vocations program. As Introduction to Vocations provides the student with occupational awareness, Vocational Assessment, which logically follows, also provides the student with occupational awareness. Vocational Assessment further provides hands-on activities. The value of vocational assessment at this time is that it:

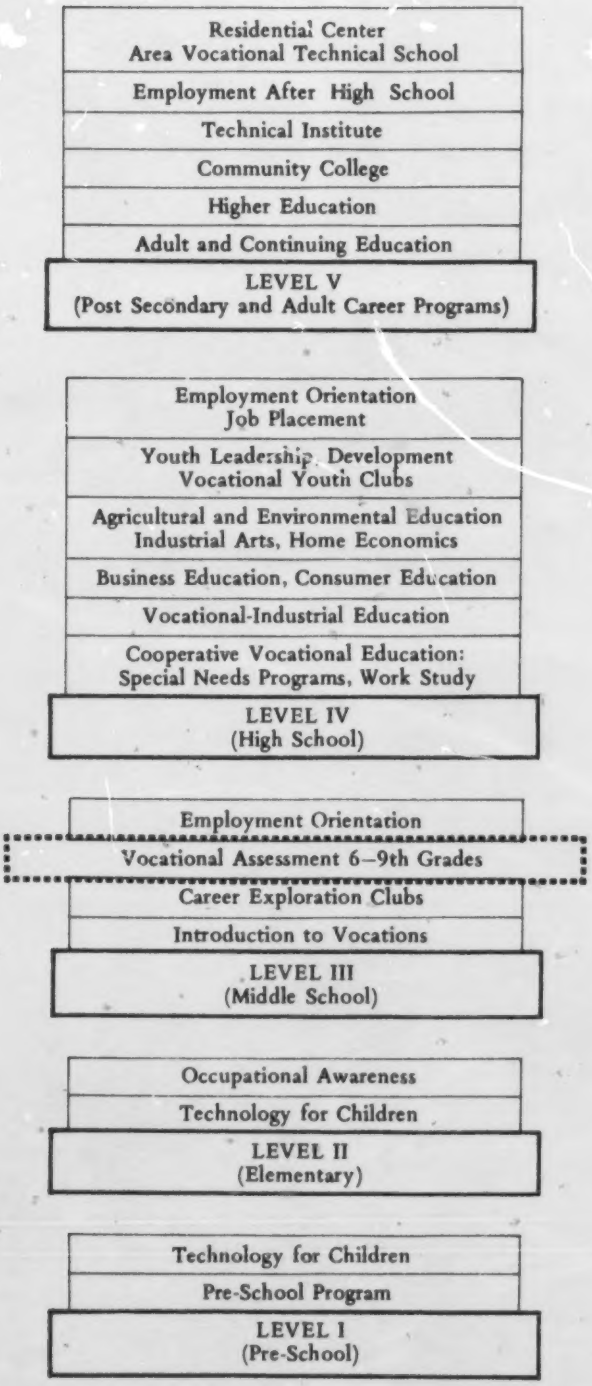
1. Provides us with vocationally relevant information about the student.
2. Provides the student with a set of experiences comparable to those of other students.
3. Provides the student with a means of acquiring information about himself or herself via direct hands-on experience.
4. Provides a situation in which the student can learn to test out the consequence of a choice. (Dunn, 1973)

Vocational evaluation, using a work sample approach, is a technology which can be used to attain the following five goals in career education programs:

1. Through observation of student performance and behavior on a series of work samples, a trained vocational evaluator can assess vocationally relevant variables including abilities, interest, temperaments, and physical capacities.
2. By establishing a core set of work samples, representative of a wide range of occupational areas and job requirements, the evaluator can expose students to a comparable set of vocationally relevant experiences.
3. Work samples provide a direct, hands-on experience for the student during which he or she can experience and feel what it is like to perform specific work tasks and to acquire information about reactions to performing these tasks.

FIGURE 1

INTEGRATING VOCATIONAL ASSESSMENT
INTO THE
N.J. CAREER DEVELOPMENT MODEL



4. By providing the student with the opportunity to choose those work samples she or he would like to perform, the vocational evaluator provides a situation in which the consequences of a vocational choice become immediately known to the student.
5. By providing the student with an opportunity to indicate his/her reactions to performance and behavior on work samples and following this up with a statement of performance and behavior as seen by the evaluator, a learning situation for developing self evaluation abilities is established.

The use of a Work-Sample Orientated Vocational Evaluation program can attain these objectives within a Career Education program. In other words, the assessment component can extend beyond the obtaining of data *about* the students and into the realm of providing the student with a learning situation in which she/he acquires basic skills that will facilitate vocational decisionmaking in the future. (Dunn, 1973)

The Employment Orientation phase of the N.J. Career Development Model should follow the Vocational Assessment to facilitate the broadening of basic skills through "simulated work" and "basic skill training." Unlike the vocational assessment work sample approach, Employment Orientation in its simulated work phase provides the student with an "actual working environment of industry with all its conditions, pressures, demands, and expectations while providing an orientation to a multiplicity of employment areas. A student in such an environment is made to feel she/he is on the job rather than in school." (Columbo, et al, 1973)

After he/she has been exposed to an array of occupations in the simulated work phases, he/she is aided in evaluating the area which best suits his or her interests and abilities. At this point, the student makes the transition from the simulated work phase to basic skill training in his/her selected area. (Columbo, et al, 1973)

Having acquired these skills, the student is ready for:

1. On-the-job placement within programs of Cooperative Education under the direction of the school's Cooperative Education Coordinator.
2. Enrollment in a regular vocational education program.
3. Enrollment in other school or community programs in which the pupil has developed an interest.
4. High school graduation followed by direct entrance into employment.
5. Placement in a sheltered workshop upon the termination of the pupil's school career (in the event that the student cannot function successfully in an unstructured environment).
6. Referral to vocational rehabilitation agencies for further assistance and training. (Columbo, et al, 1973)

Just as the Introduction to Vocations program serves as a foundation to make students aware of occupations and Vocational Assessment helps them make sound occupational choices, Employment Orientation provides experiences to develop basic skills that can prepare a student with entry level skills in a variety of occupations. Employment Orientation may also provide a student with the necessary skills to succeed in a regular vocational program which in turn can provide students with a higher level of skill training.

For the classified special needs student the data obtained from Vocational Assessment can be a tremendous aid to the Child Study Team in formulating a student's Individualized Educational Program (I.E.P.), and can fill a void. The void is the vocational aspect of the student's planning. The existing Child Study Team's report consists of data compiled by the following team members: a school social worker, a learning disabilities consultant, and a school psychologist. The I.E.P. reports provide an educational plan that is quite comprehensive. The planning is for the student's total education, but missing is the element of Vocational Assessment, necessary for the planning of vocational training and employment service for the classified student. It is essential, therefore, that the student with special needs receives Vocational Assessment services at the earliest age possible.

The Child Study Team's utilization of Vocational Assessment services indicates there is a need for this service with the classified student. These students are generally not amenable to the classroom situation and work better with concrete types of activities.

The Child Study Team should have the services of a vocational evaluator who could then help direct the team members in the development and implementation of the I.E.P. with particular emphasis on vocational assessment and training. Since the Child Study Team is already making recommendations or steering students in the direction of vocational education, it would seem logical that such a person be a part of the team who could make appropriate recommendations. This additional professional, in addition to making specific recommendations for the vocational school or vocational training, could recommend classes or programs within the comprehensive school that could supplement a vocational training program or be used as an alternative to going to vocational school, again depending upon the student and the factors involved.

III. MAJOR TYPES (METHODS) OF ASSESSMENT

There are three basic classes of situations that are used to make vocational assessments as identified in the Vocational Evaluation Project Report in the VEWA Bulletin Vol. 8, July 1975. They include: On-The-Job Evaluation, Work Samples, and Psychometrics.

A. ON-THE-JOB EVALUATIONS

Most realistic, however, some form of prevocational evaluation is necessary.

It is most efficient when it follows some preliminary period of screening. Four types of On-The-Job Evaluations can be identified:

1. **Job Site Situations**

   Job site situations have at least these characteristics:

   - The student is not necessarily paid.
   - Placement on the job is primarily for the student's benefit.
   - The placement will not necessarily result in employment in that job.
   - The employer may not experience any immediate gain.
   - The student does not displace another worker or fill a vacant worker slot.
   - The student's performance is supervised and evaluated by the employer or evaluation staff.

   Job site evaluation usually means evaluation that takes place in an actual job setting outside the evaluation unit. The student is given the opportunity to fulfill the specific requirements of a particular job. He/she receives direction from a supervisor, as if she/he was actually an employee of that industry.

2. **Production Work Situations**

   The production work (subcontract) approach is the practice of evaluating students through the use of actual industrial work brought into the evaluation unit. The main difference between On-The-Job and Production Work approaches is the option in the production situation to vary all the customary conditions of the real job in an effort to discover difficulties that would prevent the student from working effectively. One drawback to the production method is the scarcity of some types of contracts available.

3. **Trial Training Evaluation**

   Trial training evaluation situations have at least the following characteristics:

   - There is an established training program.
   - Placement is made primarily for the benefit of the student.
   - Supervision and evaluation are done by the shop or trade instructor.
   - It does not necessarily result in entry by the student into that training program.

The student is placed in a training setting in order to assess the ability to relate to the training environment and demands and the ability to learn and retain specific program content. Initial screening has usually been done by the vocational evaluator in the evaluation unit or in a pre-vocational setting.

After the student's trial exposure, determination of probable success in the training program is made by the instructor or instructional staff based upon their knowledge and experience.

4. **Simulated Job Stations**

Simulated job stations have the following characteristics:

- They replicate all aspects of a job or a work process as realistically as possible.
- They do not necessarily require payment to the student.
- They are controlled by the evaluator.
- They are located within the educational facility.

The key elements of the simulation include not only all the job tasks, but also the important environmental, physical, and social characteristics of the job. It is in the latter aspect that job simulation differs from work samples. Work samples generally focus on the job task, but they are used within the context of a vocational evaluation unit. The simulated job station expands upon the work sample by adding the simulation of working conditions typically associated with the job.

B. WORK SAMPLES

A Work Sample is a well-defined work activity involving tasks, materials, and tools which are identical or similar to those in an actual job or cluster of jobs. It is used to assess an individual's vocational aptitude, worker characteristics, and vocational interest.

- Approximates real life jobs more closely than psychological testing.
- The objective in using Work Samples is assessment of job skill potentials and work related behaviors.
- Work Sample can be an actual job sample, a simulated job sample, a single trait sample, and cluster trait samples.

1. **Actual Job Samples**

An actual job sample is a sample of work that has been taken in entirety from an occupation and brought into the evaluation unit for the purpose of determining the student's interests and potential to perform that particular job. An advantage of this type of sample is that it is a replication of the actual job. A disadvantage is that it relates to only one occupation. The cost of producing sufficient numbers of job samples can be prohibitive. The trend in work sample development is construction of samples that relate to numerous occupations or work families.

2. **Simulated Job Samples**
   A simulated job sample is a representation of the common critical factors of a job. It differs from an actual job sample in that all the factors affecting the job cannot be replicated. However, in some cases enough information might be derived from a student's performance to predict success on the job.

3. **Single Trait Sample**
   A single trait sample assesses a single worker trait or characteristic. It may have relevance to a specific job or to many jobs, but it is intended to assess a single isolated factor. Because some trait samples tend to look more like tests than actual work, they sometimes cause the student to react negatively.

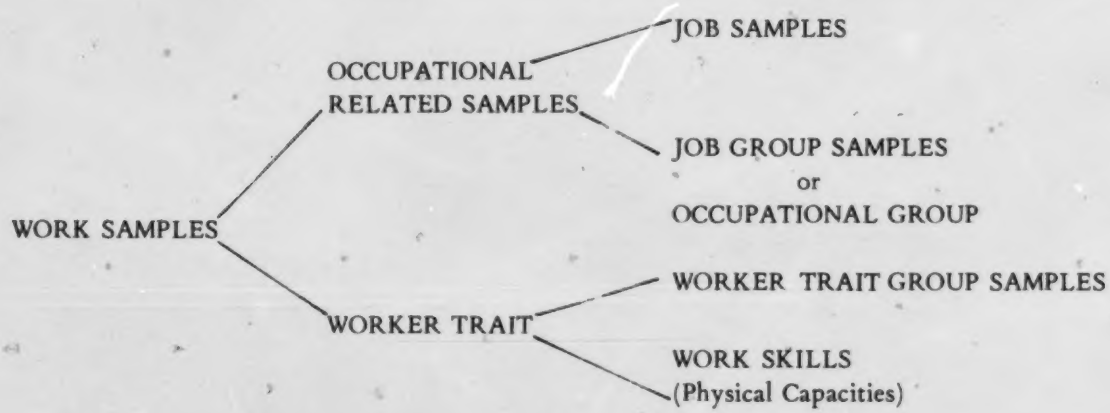
4. **Cluster Trait Samples**
   A cluster trait sample contains a number of traits inherent in a job or a variety of jobs. Based upon an analysis of an occupational grouping and the traits necessary for successful performance therein, it is intended to assess a student's potential to perform various jobs.

ADVANTAGES OF WORK SAMPLES

The major advantages of the work sample method for use in education include:

- The work sample is the closest approximation of the reality of work that can be achieved within the evaluation unit for many classified and disadvantaged students.
- It provides exposure to, and experience in, a wide range of jobs.
- Performance identical to work is required.
- It not only assesses skills, but it reveals aspects of the student's personality, interest, and attitudes towards the job.
- Special needs students respond more naturally to work-related rather than abstract tasks.
- It can eliminate cultural, educational, and language barriers in the assessment of vocational potential.

Work samples may be divided and subdivided accordingly:



C. PSYCHOMETRICS

Psychometric tests are measurement tools which utilize abstracted tasks, usually paper and pencil, of some cognitive, psychomotor, or affective trait or correlate purported to be important in general or specific job performance.

The psychometric test is used as a work evaluation tool to supplement and complement work samples and other evaluation techniques. Psychometric testing is especially useful in determining if a client has the academic background necessary to complete a formal academic or vocational training program successfully.

Psychometrics has evoked more criticism than any other vocational evaluation procedure. Of all the evaluation methods, this type of testing is the least likely to assess the vocational ability of special needs students.

Psychometric devices need not be discarded, but they should be viewed as part of the total evaluation process.

The following psychometric tests may be considered for use in an evaluation unit. The use of any of these tests, however, would be dependent upon the student population, purpose, and information to be gained.

The Dailey Vocational Test
Houghton Mifflin Co. Range: Grades 8-12 & adults
Testing time: 115–140 mins.
Designed for noncollege bound students. Validity data limited.

Differential Aptitude Test Battery
The Psychological Corporation Range: Grades 8–12
Testing Time: 300–330 mins.
Contains educational and vocational criteria.
Claims for validity are modest and realistic.

Multiple Aptitude Tests (MAT)
California Test Bureau Range: Grades 7–12
Testing time: 170–220 mins.
Consists of nine tests. Reliabilities for the tests range from the high .70's to low .90's. Validity data is low.

Brainard Occupational Preference Inventory
The Psychological Corporation Range: Grades 8–12
Testing time: 30 mins.
Covers six broad occupational fields. Scoring is simple. Evidence on validity is lacking.

Gordon Occupational Check List (OCL)
Harcourt, Brace & World Range: High School
Testing time: 20–25 mins.
Designed for use with individuals who have a high school diploma or less. 240 statements are classified into five broad occupational groups. Reliability middle to high .80's. Validity data meager.

Kuder Preference Record—Occupational
Science Research Associates — Range: Grades 9–16
Testing time: 25–30 mins.

Yields 50 scores for occupational groups and one verification score. More reliability and validity data needed.

Kuder Preference Record—Vocational
Same as above. Testing time: 40–50 mins.

Consists of sets of triads. It yields scores for interest clusters. There are two forms available.

Minnesota Vocational Interest Inventory (MVII)
The Psychological Corporation — Range: High School, Adults
Testing time: 40–45 mins.

Designed for noncollege bound students. It consists of 158 triads. Reliability is about .82.

Picture Interest Inventory
California Test Bureau — Range: Grades 7 & over
Testing time: 30–40 mins.

Consists of nine scores; mechanical is included. It is non-verbal in nature.

Occupational Interest Inventory, 1956 Revision
California Test Bureau — Range: Grades 7–16
Testing time: 30–40 mins.

Consists of ten scores grouped into three categories.

Vocational Planning Inventory, 1970 Revision
Science Research Associates, Inc. — Range: Grades 8–10
Testing time: 170–180 mins.

Consists of ten scores, eight in specific vocational curriculum areas, one in general academic, and one in general vocational.

IV. SELECTING A VOCATIONAL ASSESSMENT SYSTEM

Before a purchase is made of any commercial evaluation system for use in a public school, either vocational or comprehensive, careful consideration must be given to two main areas:

1. The student population to be assessed.
2. The purpose of the assessment.

Both of these areas should be analyzed before selecting the equipment to be used in the evaluation unit.

The first area concerning the student population is the identification of the group or groups that will utilize the service of the evaluation unit. Whether they are handicapped, disadvantaged, and at a certain grade level are important factors to consider. Keep in mine that there is no one system that can do all things for all groups. This will help you avoid frustration in the selection process and reduce the possibility of failure of the evaluation program. When the system has been checked against the needs of the students, then a decision can be made on its appropriateness for that group.

The second area is the purpose of the evaluation. Some of these purposes may be to:

- Provide career or occupational information.
- Provide hands-on experiences.
- Provide for assessment of interests and aptitudes.
- Help the student to select a vocational training objective.
- Assist the student in understanding the reasons for his/her inability to obtain and/or maintain a job.

Some systems attempt to provide a thorough evaluation of the student's aptitudes and work behaviors; other systems provide occupational information and experience, often at the expense of a thorough ability assessment. (Botterbusch, Sax, 1976) Therefore, a thorough understanding of the school's purpose for the assessment is necessary before an intelligent selection of a vocational assessment system can be made.

A critical factor in purchasing a system (Botterbusch, Sax, 1976) should be based on the knowledge of what is needed and not on the cost or atrractiveness of the hardware. Usually, no one system will meet the needs of an evaluation unit, and the purchased system should be integrated with facility constructed devices, other evaluation systems, on-the-job evaluations, and psychological tests.

Obtaining as much information about a particular system should be done before it is purchased.

Some sources of information are:

1. Contact evaluators in schools with vocational evaluation units to find out if they are using the system you are interested in purchasing to determine the advantages and disadvantages.

2. Visit those schools to see the system in operation with students.
3. Material Development Center (MDC), Stout Vocational Rehabilitation Institute, University of Wisconsin, Stout, Menomonie, Wisconsin 54751
   a. Publication entitled "A Comparison of Seven Vocational Evaluation Systems"
   b. A sound-slide presentation on each evaluation system described in the publication.
4. Contact the manufacturer for information. Some selective systems include:

Vocational Evaluation System by Singer (VES)
Singer Education Division
Career Systems
80 Commerce Drive
Rochester, New York 14623

Jewish Employment and Vocational Service (JEVS)
Vocational Research Institute
Jewish Employment and Vocational Service
1624 Locust Street
Philadelphia, Pennsylvania 19103

Vocational Information and Evaluation Work Samples (VIEWS)
Vocational Research Institute
Jewish Employment and Vocational Service
1624 Locust Street
Philadelphia, Pennsylvania 19103

The Tower System (TOWER)
ICD Rehabilitation and Research Center
340 East 24th Street
New York, New York 10010

Comprehensive Occupational Assessment and Training System (COATS)
Prep Inc.
1575 Parkway Avenue
Trenton, New Jersey 08628

McCarron-Dial
Commercial Marketing Enterprises
Department: MDWES
11300 North Central, Suite 105
Dallas, Texas 75231

Talent Assessment Programs (TAP)
Talent Assessment Programs
7015 Colby Avenue
Des Moines, Iowa 50311

Valpar Component Work Sample Series (VALPAR)
Valpar Corporation
655 N. Alvernon
Suite 108
Tuscon, Arizona 85716

Wide Range Employment Sample Test (WREST)
Guidance associates of Delaware, Inc.
1526 Gilpin Avenue
Wilmington, Delaware 19806

V. A COMPARISON OF THE MAJOR VOCATIONAL ASSESSMENT SYSTEMS

The two figures that follow, Figure 2 (Administrative Considerations – Comparison of Major Work Sample Systems, pages 19 and 20) and Figure 3 (Evaluator Considerations – Comparison of Major Work Sample Systems, pages 21, 22, and 23.) are a modified version of the "Comparison of Seven Vocational Evaluation Systems" completed by the Materials Development Center, University of Wisconsin at Stout. For educational purposes, the charts are divided into administrative and evaluator considerations. Although there are no references available stating that the variables identified are significant for education, these variables were included based on the practical experience of an operating evaluation unit in a vocational school.

The five systems chosen for the comparison were selected because of their utility and appropriateness for use with Special Needs students. The system or combination of systems, that will be appropriate for a particular group, must be determined based on individual merits. Inclusion of these five systems in this comparison is not an endorsement for their use with Special Needs students.

FIGURE 2: ADMINISTRATIVE CONSIDERATIONS

COMPARISON OF MAJOR WORK SAMPLE SYSTEMS

	SINGER	JEVS	VIEWS	TOWER	COATES WORK * SAMPLES
Number of Work Samples	22	28	16	110	10
Cost of System – as of July, 1977	$20,000.00 +	$6,740.00 including training	$4,920.00 including training	$9,000.00	$7,140.00
Additional Costs					Computer print-out
Space Required – System Can Be Set Up and Used In	Approximately 900 square feet instructional area	Approximately 650 square feet instructional area	Approximately 650 square feet instructional area	Approximately 900 square feet instructional area	Approximately 800 square feet instructional area
Storage of Materials	Each sample is self-contained in carrel	Each sample is individually boxed – shelves required	Each sample is individually boxed – shelves required	Samples are not individually boxed – some shelves required	Each sample is individually boxed
Maintenance	No Comparative data available – Check with other Evaluation Units All systems require preventive maintenance				
Integration With Other Systems for Information Purposes	JEVS VIEWS TOWER	VIEWS TOWER SINGER	TOWER SINGER JEVS	SINGER JEVS VIEWS	
Uses: Career Awareness	Extensive occupational information given to student	Limited use	Limited use	Exposure to a variety of work areas	Extensive occupational information given to student

* Information pertains to WORK SAMPLE component only.

FIGURE 2: ADMINISTRATIVE CONSIDERATIONS (cont'd.)

COMPARISON OF MAJOR WORK SAMPLE SYSTEMS

	SINGER	JEVS	VIEWS	TOWER	COATES WORK * SAMPLES
Vocational Data Related To:	Dictionary of Occupational Titles (DOT)	DOT	DOT	DOT	Use of Career clusters
Counselor/Child Study Team Utilization	Yes	Yes	Yes	Yes	Yes
Grade Utilization	7 – 12	7 – 12	7 – 12	7 – 12	7 – 12
Student Utilization	Educable Disadvantaged Normal	Disadvantaged Normal	Trainable Educable	Physically disabled Disadvantaged	Educable Disadvantaged Normal
Length of Time to Complete Assessment	Approximately 3 weeks	Approx imately 1 week	Approximately 1 week	Approximately 3 weeks	Approximately 2 weeks

* Information pertains to WORK SAMPLE component only.

FIGURE 3: EVALUATOR CONSIDERATIONS

COMPARISON OF MAJOR WORK SAMPLE SYSTEMS

	SINGER	JEVS	VIEWS	TOWER	COATES WORK * SAMPLES
Training Required	No	Yes	Yes	Yes	No
Training Available	Yes	Yes	Yes	Yes	Yes
Length of Training	2 weeks	2 weeks	1 week	3 weeks	1–3 days
Evaluator Manual	Yes	Yes	Yes	Yes	Yes
Sequence of Administration	Discretion of Evaluator	Progressive from easiest to hardest	Progressive from easiest to hardest	Progressive within areas	Discretion of Evaluator
Providing Assistance	Checkpoints built in	Not recommended	Individualized training until student masters activities necessary for performing work sample	Not specified	Encouraged if necessary for student to complete work sample
Repeating Work Samples	Repeated if desired by Evaluator	Not recommended	Encouraged until performance on work sample can be evaluated	Encouraged for upgrading	Encouraged to demonstrate skills gained
Observation of Students	Very frequent observations	Extensive observations	Extensive observations	Observation not emphasized	Frequent observations
Work Performance	29 factors defined	25 factors specified	10 work factors	Few factors specified	5 major categories of on-the-job behaviors specified

* Information pertains to WORK SAMPLE component only.

FIGURE 3: EVALUATOR CONSIDERATIONS (cont'd)

COMPARISON OF MAJOR WORK SAMPLE SYSTEMS

	SINGER	JEVS	VIEWS	TOWER	COATES WORK * SAMPLES
Work Behaviors	Clearly defined	Clearly defined	Clearly defined	Not specifically defined	Work behaviors to be observed are defined
Emphasis in Scoring	Time and quality given equal weight	Time and quality given equal weight	Time and quality given equal weight	Time and quality given equal weight	Quality of student performance and finished product
Error Scoring	Compared to standards	Compared to standards	Compared to standards	Compared to standards	Check all items against criteria provided
Time Norms	Rated on 5-point scale	Rated on 3-point scale	Rated on 3-point scale	Rated on 5-point scale	Ratings of time not considered important
Quality Norms	Rated on 5-point scale	Most rated on 3-point scale	Rated on 3-point scale	Rated on 5-point scale	Rated on 4-point scale
Timing of Work Sample	Evaluator times student	Student uses time clock	Evaluator times student	Evaluator times student	Student keeps track of time for evaluator
Timing Interval	Varies with each work sample	From end of instructions to completion of task	Two intervals: timing of training and then time of completion of task	From end of instructions to completion of task	Varies with each work sample

* Information pertains to WORK SAMPLE component only.

FIGURE 3: EVALUATOR CONSIDERATIONS (cont'd)

COMPARISON OF MAJOR WORK SAMPLE SYSTEMS

	SINGER	JEVS	VIEWS	TOWER	COATES WORK * SAMPLES
Method of Instruction Giving	Audio-visual	Most oral and demonstration	Oral and demonstration training	Written instructions	Audio-visual
Modification of Instruction Possible	Limited evaluator intervention	Not recommended	Possible	Possible	Limited evaluator intervention
Modification in Use of System	Yes	No	Yes	Yes	No

* Information pertains to WORK SAMPLE component only.

VI. SETTING UP THE VOCATIONAL ASSESSMENT UNIT

COSTS

If a diverse student population is to be evaluated, utilization of more than one vocational assessment system should be considered. Chapter IV discusses factors to consider in selecting a vocational assessment system and Chapter V compares the major vocational assessment systems, indicating which systems are compatible. In addition to these factors, one must consider the total costs in establishing a vocational assessment unit.

Present and future budgets must be analyzed very carefully, and realistic projections for the maintenance and expansion of the vocational evaluation unit must be incorporated in the budget.

PLAN FOR GROWTH

1. New vocational assessment systems will continue to be developed.
2. Existing vocational assessment systems will be expanding.
3. Besides the commercially prepared vocational assessment system, the evaluator will be developing his/her own vocational assessment instruments.
4. The concept of vocational assessment in a school district may gain wide approval; and a demand for evaluating more students and diverse populations than originally anticipated may occur.

PLAN TO GET OPTIMUM USE OF THE UNIT

This service can be made available to a broader population. Example: Offering this service to adults in an evening school program. The unit can accommodate individuals from:

1. Rehabilitation
2. Mental health clinics
3. Probation
4. Senior citizens groups
5. Junior colleges
6. C.E.T.A. clients
7. Any individual who wishes to explore his/her vocational potential.

SAFETY AND SHOP MANAGEMENT

Factors to consider:

1. The classroom and labs surrounding the evaluation unit should not produce a noise level that interferes with the evaluation unit, nor should the noise level from the evaluation unit interfere with the other areas.
2. Adequate space should be provided between work station areas to enable the students to perform their tasks without interfering with other activities.

3. Sufficient light must be available.
4. Temperatures should be appropriate for the activity taking place and the time of year.
5. Equipment to be used by the students should have proper safety devices.
6. Protective clothing and eye wear should be provided.

DESIGNING THE EVALUATION UNIT

1. Specific areas should be designated for:
   a. On-the-job evaluation
   b. Work Samples
   c. Psychometrics

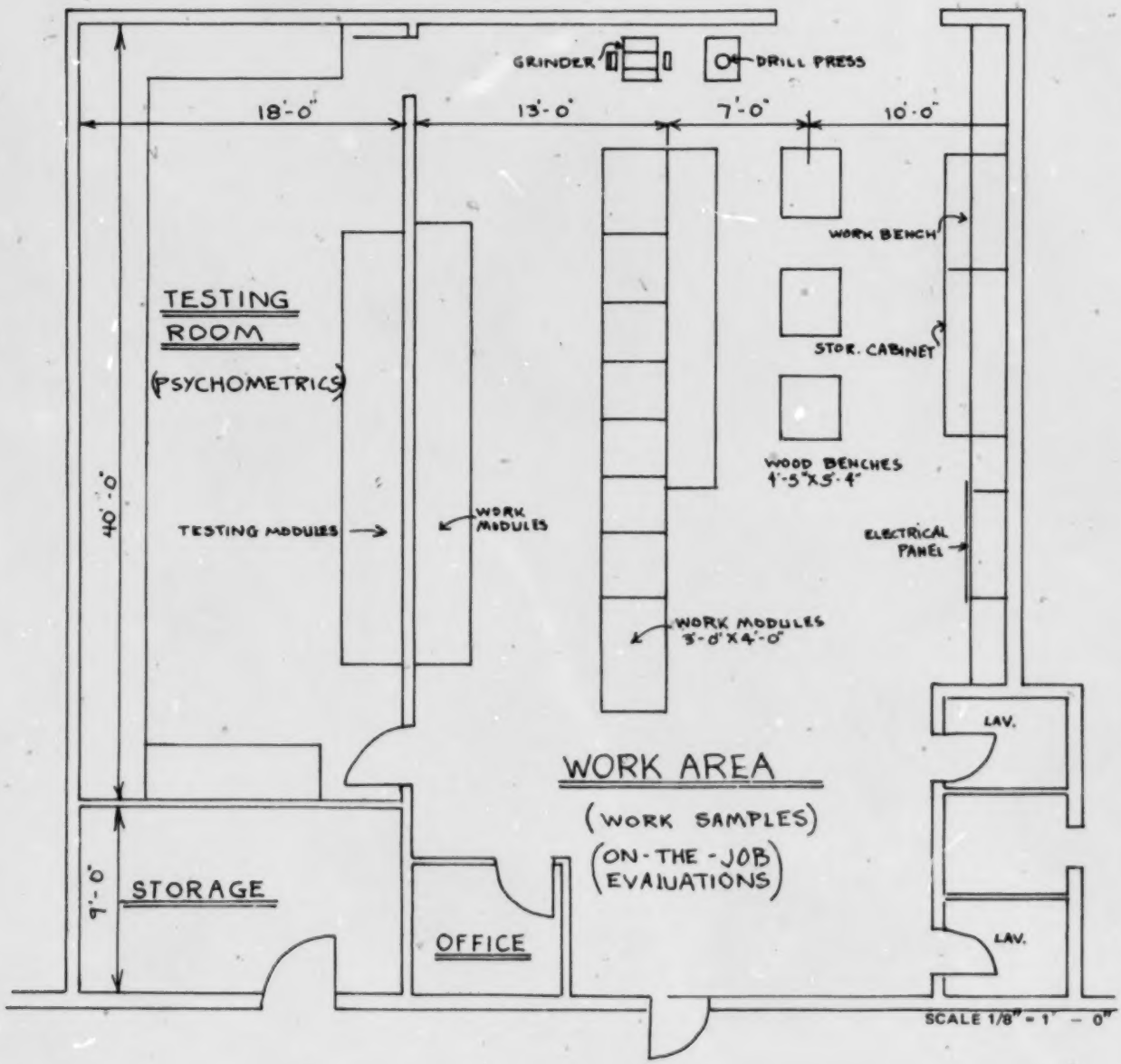
   Because of the unique characteristics of each of the above, designated areas would insure a smooth and efficient shop operation (Figure 4).

2. Evaluator/student conferences should be held in a private area to permit orientation, counseling, and followup interviews.

3. Ample space for storage should not be overlooked. Consideration should be given to storing the following:

   Supplies
   Additional equipment
   Student records
   Portable work samples

FIGURE 4



A SUGGESTED FLOOR PLAN & LAYOUT
FOR EVALUATION UNITS

VII. WRITING THE VOCATIONAL EVALUATION REPORT

Report writing in vocational evaluation is as important as the evaluative process itself. A report that is well planned relays to the counselor significant vocational data that can be used to determine a specific course of action for the student.

The vocational evaluator needs order and planning in his/her report. The report is prepared to communicate facts and provide answers to important questions about a student and that student's vocational training. If this is not done, the evaluation itself is of little value (Coffey, D., 1970). Generally, the following information is included in the report (Scelfo, J., and Micali, J., 1976).

1. A determination of the student's goals as being realistic or unrealistic based upon his/her performance on related work samples.
2. The student's work attitudes and work habits.
3. An objective performance level established through use of "hands-on" activities.
4. Data concerning skill training and/or modification dealing with work adjustment.
5. Identification of vocational strengths and weaknesses.
6. Interests and aptitudes.
7. Verification of the Child Study Team's/guidance counselor's vocational assessment of the student.
8. Recommendations concerning:
   a. Specific pre-vocational or vocational programs.
   b. Courses at the comprehensive school which would aid the student in succeeding at the vocational school.
   c. Alternative curriculum at the comprehensive school in lieu of vocational training.
   d. Remedial education
   e. The services of the Child Study Team
   f. Counseling in attitudes, work habits, appearance, or attendance. The purpose of the report should be to help the counselor achieve his/her primary goal of assisting the student to gain skills which will permit him/her to reach functional independence. The report is also intended for the student's permanent record at his school.

REPORT OUTLINE

Following is a basic structural design suggested for use as a guide when writing a description of the student and his/her progress at the Evaluation Unit. The narrative, if it is to be effective, should follow such a design or deviate from it accordingly. In any case, some planning must be a deliberate prelude to writing.

In general, a vocational evaluation report in the educational setting follows an outline that includes:

1. Introduction
   a. Attendance – Excused or unexcused tardiness; excused or unexcused absences. The evaluator should state when they occurred and the reasons for them.
   b. Social interaction – *Interaction with Peers.*
      Describe the manner in which the student relates to classmates. This description should only pertain to the interaction observed by the evaluator.

      Interaction with the evalutor.

      The evaluator states how the student interacts with him/her as well as with other adults or authority figures who are a part of the student's educational environment.

2. Career Goals
   a. Interests – The evaluator identifies the interests of the student based upon the findings of the assessment.
   b. Realistic or unrealistic – The evaluator notes goals that are realistic or unrealistic based upon the student's performance on related work samples/on-the-job evaluation/psychometrics.

3. Work Samples/On-The-Job Evaluation/Psychometrics
   a. Performance – The evaluator assesses and states the student's performance by describing the student's progress through the evaluation process.
   b. Work habits – The evaluator should describe and elaborate on how the student expresses or displays his/her feelings about assigned work and also the behaviors observed while performing it.
   c. Level of frustration – The evaluator should describe the student's reaction to his/her work. Indicate if the student got upset, gave up, or completed the task and the manner in which the student was able to handle any problems.
   d. Supervision – The evaluator should describe the amount of aid the student required in order to complete assigned work satisfactorily. She/he should also indicate whether the student was an independent worker, the amount of prodding required to either start or finish a task, or if initiative was displayed.

4. Behavior: Physiological and Emotional
   a. Comments related to physical or behavioral problems: If a problem exists in these areas, the evaluator should describe what is actually seen and not attempt to interpret the observed problem.

b. Effect of the problem(s) upon the student's performance, either academic or vocational: The evaluator describes how the problem(s) affects the student's performance.

5. Additional Comments

   The evaluator can use this section to substantiate findings made during the evaluation.

6. Recommendations
   a. Within the school where the assessment takes place.
   b. For other educational facilities.
   c. Agencies outside the educational setting.

GUIDELINES FOR WRITING NARRATIVE REPORTS

The following information is presented to guide evaluators in their efforts when writing a narrative report. Each point is seen as essential to properly construct an effective report with clarity and comprehensiveness.

1. Be consistent.
   a. Make sure the report reflects your judgment on any check-off sheet that may accompany it.
   b. Be sure not to praise *and* criticize the same performance.
2. Write statements in a positive form.
3. Make statements which are objective.
4. Avoid generalizations; be specific and factual.
5. Do not overwrite; omit needless words and avoid stilted phrases.
6. Avoid redundancy.
7. Be neat. Check grammar, clarity, and legibility.
8. Keep in mind that these reports are often utilized for determining the student's future educational and vocational training.

CONCLUSION

The student being referred for evaluation does not enter the Evaluation Programs with a manual explaining how he or she works. It is therefore up to the evaluators to describe and record the Vocational Assessment in an accurate and objective manner.

Writing narrative reports is a never ending job making great demands on the evaluator's time. However, it need not be viewed as a static process; it is a dynamic and changing activity because of its focus on students with their changing goals and aspirations.

Report writing will always be an important task for Vocational Evaluators because of the significant effect it can have upon the future of their students. A well written report increases the value of the evaluator's appraisal of the student. It bridges the gap between what the evaluator has learned about the student and what the guidance counselor or Child Study Team needs to know to help the student in deciding upon a career direction.

VIII. OPERATIONAL PROCEDURES FOR THE VOCATIONAL ASSESSMENT UNIT

GUIDELINES FOR STUDENT REFERRAL

Whenever a student is not achieving academically and is functioning poorly in the classroom (Scelfo, J., Micali, J., 1976), a comment frequently voiced is that the student is still "good with his hands." Almost inevitably the student becomes a candidate for vocational school. The reasoning is logical because that is where students work with their hands. This practically implies that there is a positive relationship between being "good with one's hands" and attending vocational school. The intervening variables of motivation and interest, however, can negatively affect the relationship; and sending a student to a vocational program on this premise is, at best, haphazard. It is at this point that referral for vocational evaluation should be made.

Knowing the student's level of performance, a realistic expectation of his progress can be made. Awareness of the student's interests and aptitudes allows for a wider margin of success in vocational course selection. Finally, recognition of the student's motivation for attending vocational school can be used as a good predictor that the training will be completed.

The following are general guidelines that may be used when deciding whether a student should be considered for vocational evaluation:

1. Classification by the Child Study Team.
2. Unemployability or a need for extensive vocational training as determined by the Child Study Team or guidance counselor for a classified or non-classified student.
3. Evidence of failure in the classroom preventing the student from succeeding in the academic environment.
4. Negative attitude towards the comprehensive school as a result of poor academic achievement.
5. Uncertainty on part of student as to career goals.
6. Performance below appropriate grade level.
7. Determination of whether a student's career goals are consistent with his/her level of performance.
8. Motivation towards attending vocational school as evidenced by:
   a. Success in industrial arts courses.
   b. Exposure to the trades through career education, family, or employment.

PREPARING THE STUDENT FOR VOCATIONAL ASSESSMENT

For many students vocational assessment will be their first exposure to a shop environment. A good portion of students selected for vocational assessment have been disillusioned with their previous educational experience because they were marked with failures. The fact is that, in some cases, students are selected for vocational assessment as a last resort prior to placement in a residential setting. It is obvious that the student

selected for vocational assessment does not need to be further frustrated. Therefore, it is essential that the student be carefully prepared for this experience. She/he should be aware of:

1. Why she/he is being evaluated.
2. In what types of activities she/he will be involved.
3. What is expected of him/her.
4. What these experiences may lead to.

It is very important to develop a sequential plan in order to inform students, parents, and the referring school officials of the vocational assessment process. The following is a plan which can be utilized:

1. Student meets with guidance counselor or Child Study Team member. Vocational assessment is explained to the student.

2. Guidance counselor notifies parents and informs them of the possible placement of their child in vocational assessment.

3. Guidance counselor contacts school official responsible for vocational assessment and sets appointment for visitation by him/her, parents, and student. It would be practical, when possible, to schedule *groups* of students, parents, and counselors.

4. During the visitation, the vocational assessment official may:
   a. Conduct interviews.
   b. Introduce group to the evaluators.
   c. Guide a tour of the facilities.
   d. Give a detailed orientation of the vocational assessment process.
   e. Field questions from the visitors.

5. Guidance counselor gets feedback to vocational assessment official indicating those students whom she/he wishes to refer for evaluation, placing them in order of priority based on need.

6. The student is given additional information pertaining to the vocational assessment process by the evaluator upon entry.

SCHEDULING STUDENTS

1. Two methods:
   a. Block – Student is scheduled for a specific length of time. Hopefully, the student will complete all of the tasks in the vocational assessment process prior to the termination date.
   b. Flexible – No specific time period is prescribed. The student works at his/her own pace and is terminated from the vocational assessment process only when the evaluator feels a valid assessment has been obtained.

2. Advantages – Block
   a. It is much easier for the personnel of the sending school and the vocational assessment unit to schedule students, utilizing the block system since they will be sending and receiving large groups of students at one time.
   b. It is easier for a sending district since the referring school official will know exactly how long the student will be involved and can better make schedule changes and prepare the student's teacher for his/her absence and return.
   c. More students can be scheduled per year by keeping the vocational assessment time short.

3. Advantages – Flexible
   a. The most obvious and important advantage is that it permits a student to work at his/her own rate, thus eliminating competition with his/her peers.
   b. This method more readily permits heterogenous grouping of students with various abilities.
   c. The evaluator is not pressed for time to obtain a comprehensive assessment.

COMMUNICATION

1. Concerns
   a. Vocational Assessment may be a new concept in some school districts and may require considerable orientation and explanation.
   b. When several school districts send students to the same Vocational Assessment program, communication problems may occur. Personnel, schedule, and policy changes may tax the most sophisticated communications sytem.

2. Methods of Communication
   a. Brochures
   b. Sound slide presentation
   c. Periodic meetings with personnel from sending districts
   d. Orientation tours

3. Feedback
   a. A formal report is completed, usually a week after a student is terminated;
   b. The original copy is sent to the guidance counselor, Child Study Team, or other referring official;
   c. Scheduling of student for vocational training, when recommended, should be done in cooperation with referring school and vocational school officials.

4. Followup
   a. A check-off list indicating which recommendations the referring school official will implement is attached to the final vocational assessment report.
   b. After completing the check-off list, the referring school official will return it to the Vocational Assessment unit to determine the overall effectiveness of the vocational evaluation process.

IX. STAFFING THE EVALUATION UNIT

In education a vocational evaluator could be defined as that professional person who is responsible for the entire career/vocational assessment of an individual student. This includes reviewing all referral information, orientation of the student, planning, maintaining and coordinating the student's program, maintaining a written case record, holding formal and informal conferences as appropriate, making the termination decision, preparing the final report, and ensuring student followup.

At present, evaluators employed in the public schools of New Jersey need only meet certification requirements to work in school systems. Their educational backgrounds are diverse and generally include, but are not limited to, degrees in vocational evaluation, psychology, school counseling, special education, industrial arts, and sociology.

Since a void currently exists in higher education for the training of vocational evaluators in the Northeast, securing a qualified vocational evaluator is at best tenuous. Subsequently, it would appear that we have a dilemma if effective evaluation services are to be provided. Surprisingly, this is not the case as related to the authors by vocational evaluators throughout the state. Vocational evaluators in New Jersey have functioned reasonably well by drawing upon their respective backgrounds in education and industry. This is not to say that training for an evaluator does not matter, it does.

Figure 5, (The Vocational Evaluator in Education) on the following page lists criteria that can be used as a guide for selecting vocational evaluators.

FIGURE 5 – THE VOCATIONAL EVALUATOR IN EDUCATION

Has a Knowledge Of	Is Trained To	Understands	Assesses Student Strengths & Weaknesses Through Use Of	Has The Ability To
History and philosophy of vocational evaluation	Select appropriate work samples	How the following affect the student:	Student's educational history	Carry out student orientation to vocational evaluation
Theory of vocational evaluation	Administer work samples	Psychological conditions	Student's medical history	Relate to students of diverse backgrounds and values
Occupational information resources and Occupational Classification System	Interpret work samples	Behavior disorders	Student's psychological history	Motivate and support individual student while in evaluation
The world of work	Use and record behavioral observations	Economic/cultural deprivation	Student's social history	
Worker characteristics	Write comprehensive vocational assessment reports	Medical conditions	Dictionary of Occupational Titles	
Disabilities and their physical and psychological characteristics		Theories of: vocational development, personality, learning, and human development	Major types of vocational assessment systems	

X. FUTURE OF VOCATIONAL ASSESSMENT

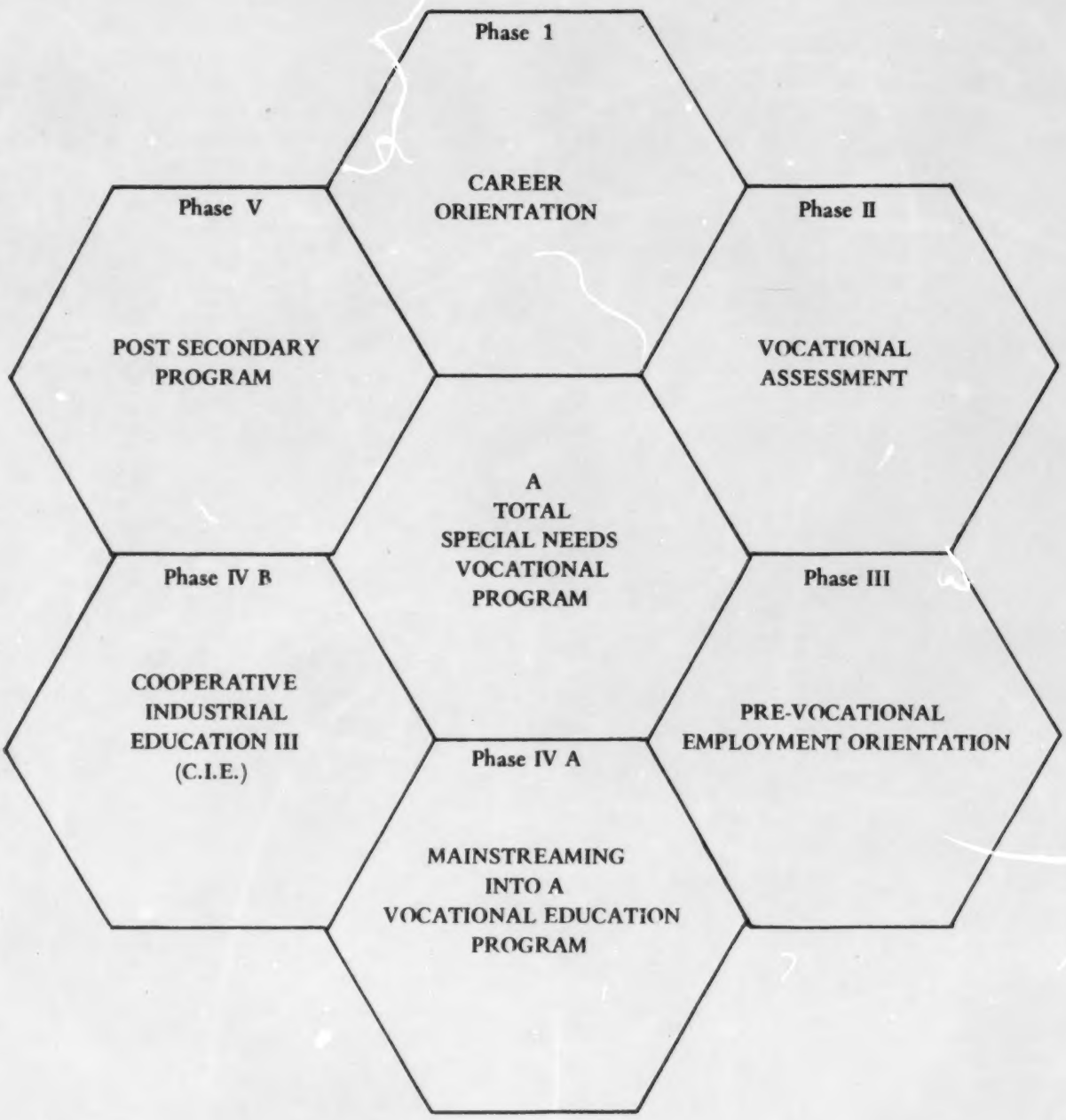
The future of vocational assessment depends upon the quality of the programs which precede and follow it. Vocational assessment is certainly a valuable educational tool since it prescribes the student's future vocational education. However, to be truly effective, vocational assessment must be incorporated into a total program or a carefully planned succession of programs. An example of such a total program can be seen in Figure 6.

As the vocational schools are increasingly being called upon to deal with the student who was previously discarded and who cannot be validly tested by paper and pencil methods, vocational assessment shows promise of being able to test the hard-to-test Special Needs student. The choice of an appropriate career/vocational goal and the necessary training is critical and must be faced by both handicapped and disadvantaged students. These students can be well served by a prescriptive vocational diagnosis obtained through a comprehensive vocational assessment program leading to a specific vocational training plan.

The role of vocational assessment in providing this service must face some major issues in the future.

- What will limit its utilization?
- Will the technology of vocational assessment be restricted for use solely with special needs students?
- What is its potential for expansion within education?
- Are its resources best suited for assessment, or are there other avenues to still explore?
- Is it possible for vocational assessment to go beyond the confines of education directly into the labor market with its recommendations.
- With the expected increases in students who are (1) female, (2) disadvantaged, (3) 25-39 years old, and (4) non-goal oriented seeking to enter vocational education, can a more efficient delivery system of vocational assessment be provided?
- Will evaluation units be able to do more "customizing" of work samples based upon the geographic and target population needs of their students?
- And, finally, what should the position be of the vocational evaluator who is neither a teacher nor an administrator within education?

A TOTAL SPECIAL NEEDS VOCATIONAL PROGRAM



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GLOSSARY

APTITUDES (Aptitude): The probable level of future functional outcome that could be reached following further maturation and/or training.

ASSESSMENT: A process of finding out what the strengths and limitations of an individual are in terms of optimal functional outcomes; and developing proposals for alternate service plans.

AUDIO-VISUAL MATERIALS: In the evaluation setting audiovisual materials can be used to enhance student self-evaluation and encourage vocational exploration.

DISADVANTAGED STUDENTS: Students who are identified as educationally disadvantaged according to the criteria below.

- Potential dropouts (including chronic unexcused absences and/or tardiness;
- Two years below proper grade for age;
- Insufficient communicative and/or computative skills for regular vocational program;
- Inability to form responsible relations with the school and/or community environment: or
- Other evidence of failure or factors that prevent pupils from succeeding in regular vocational programs.

EVALUATION: Process of assessment against some criteria.

FOLLOW-UP INFORMATION: Data collected after services provided.

FUNCTIONAL INDEPENDENCE: The capacity to take care of one's own affairs to the extent that physical, mental, or emotional conditions permit. Functional independence may lead to economic independence and results in a socially healthy individual.

HANDICAPPED STUDENTS: Persons who have been classified by the Child Study Team as being handicapped according to the following definition: Persons who are mentally retarded, hard of hearing, deaf, speech impaired, visually handicapped, seriously emotionally disturbed, orthopedically impaired, or other health impaired persons who by reason thereof require special education and related services, and who because of their handicapping condition, cannot succeed in the regular vocational education program without special education assistance or who require a modified vocational education program.

INITIAL SCREENING: The process of reviewing all available pertinent data on referrals to determine the need for vocational evaluation and to establish a program plan.

INTERVIEW: Communication between two or more persons used for such purposes as diagnosis, education, or just to gain information.

JOB CLUSTERS: (Work Families, Job Families): Related occupations grouped on the basis of similar job requirements, such as, specific duties of the job, materials and equipment used; and skill, knowledge, and worker characteristics required.

JOB EXPLORATION: A process whereby a student is exposed to work experience and occupational information which provides feedback to the student in order to increase his/her knowledge of the world of work, and feedback to the evaluators on which to make judgments.

JOB TASK: An actual single work activity that is taken in its entirety without any changes from a specific job.

NORMS: A single value or range of values constituting the usual performance of a given group. A standard of achievement as represented by the performance of a reference group including the median or average.

OBSERVATIONAL PROCEDURE: An organized method of recording what a student does, for the purpose of documenting behavior; the emphasis is usually upon productivity, behavior patterns, expressed interests and interaction while working. Used to gain information concerning a student's overall level of functioning.

PSYCHOMETRIC INSTRUMENTS: Abstract tasks, usually of a paper and pencil nature.

REFERRAL SOURCE: The person who refers a student for services. This includes, but is not limited to, school guidance counselors and child study teams.

SIMULATED JOB STATION: A work setting which has the following characteristics: (1) all aspects of a job (not limited to job tasks) or a work process replicated as realistically as possible; (2) the setting is controlled by the evaluator; and (3) it is located within the evaluation unit.

STAFF CONFERENCE: Formal or informal conferences held by the staff working with a student to review his/her progress, develop further plans, and make recommendations as to further action needed by and for the student.

STANDARDIZATION: A uniformity of procedures used in administering and scoring of a measuring instrument.

TOOLS OF EVALUATION: All the means and media with which the evaluator and the student carry out vocational evaluation.

VOCATIONAL EVALUATION PROGARM: An organized and comprehensive service staffed by specialists who systematically and comprehensively utilize work activities (real or simulated) and/or educational services as the focal point for vocational assessment and exploration. It incorporates medical, psychological, social, vocational, and educational data for the establishment and attainment of individual goals.

VOCATIONAL EVALUATION REPORT: A logical, well planned, carefully written means of communicating vital vocational information about a student. It is a studied, permanent record of significant vocational data observed as a student and an evaluator interact in various types of work or worklike situations. It puts the plan, action findings, logic, and interpretation of the evaluation in writing. It usually includes a picture of the student's worker traits and how they compare to minimal requirements of work areas, physical capacities, learning ability, personal characteristics, social competence, other vocational factors, and recommendations for specific vocational training programs, remedial academic work as it relates to vocational training, and/or other services.

VOCATIONAL EVALUATION:

1. The process of observing behaviors and interpreting them against some criterion.
2. The process of assessing what a student does and how well she/he does it against some criterion.
3. One function of a personalized service that obtains and synthesizes information pertinent to students with vocational problems to assist them in identifying and planning an appropriate vocation(s).
4. A comprehensive process that systematically utilizes work, real or simulated, as the focal point for assessment and vocational exploration, the purpose of which is to assist students in vocational development. Vocational evaluation incorporates medical, psychological, social, vocational and educational data in the attainment of the goals of the evaluation process.
5. A specialized form of clinical assessment requiring a specialized technology and environment, requiring a period of several days or even weeks of close observation and judgment, characterized by the use of real or simulated work tasks and activities in a situation which simulates some of the demands of work environments.

VOCATIONAL EVALUATION UNIT: The staff, plant, and equipment necessary to carry out a vocational evaluation program.

VOCATIONAL EVALUATOR: A professional person who is responsible for the entire career vocational assessment of an individual student. This includes reviewing all referral information, orientation of the student, planning, maintaining and coordinating the student's program, maintaining a written case record, holding formal and informal conferences as appropriate, making the termination decision, preparing the final report, and ensuring student followup.

WORKER TRAIT: The requirements made of the worker in terms of aptitudes, general educational development, vocational preparation, physical demands, and personal traits. These are reflected in: training time, aptitudes, temperments, interest, physical demands, and environmental conditions.

WORK SAMPLE: A well defined work activity involving tasks, materials, and tools which are identical or similar to those in an actual job or cluster of jobs. It is used to assess an individual's vocational aptitude, worker characteristics, and vocational interests.

1. Job Sample – Those work samples that in their entirety are replicated directly from industry and include the equipment, tools, raw materials, exact procedures, and work standards of the job.

2. Simulated Work Sample – Work samples which attempt to replicate a segment of the essential work related factors and tools of a job as it is performed in industry.

3. Single Trait Work Sample – Assesses a single worker trait or characteristic. It may have relevance to a specific job or many jobs, but it is intended to assess a single isolated factor.

4. Cluster Trait Work Sample – A single work sample developed to assess a group of worker traits. Contains a number of traits inherent in a job or a variety of jobs. Based upon an analysis of an occupational grouping and the traits necessary for successful performance therein, it is intended to assess the individual's potential to perform various jobs.

WORK SAMPLE NORMS: Specified standards that enable an evaluator to compare an individual's performance on a work sample with meaningful criteria.

WORK SAMPLE STANDARDS: The rules for the constructing, administering, scoring, and interpreting of work samples in accordance with some established model.